<u>What is Claimed is:</u>

1. A method for forming a chamber in an electronic device, the method comprising:

preparing an outer surface on a solidified core material, the solidified core material in a depression formed in a substrate; and

establishing a layer on the prepared outer surface of the solidified core material and a portion of the substrate surrounding the depression, the established layer and the substrate defining a chamber.

2. The method of claim 1 wherein the established layer is composed of an optically transmissive material.

3. The method of claim 1 wherein the substrate is one of a semiconductor material and an optically transmissive material.

4. The method of claim 1 wherein the core material is a bifunctional material, the bifunctional material exhibiting a solidified state at a first temperature and a fluidized state at a second temperature greater than the first temperature.

5. The method of claim 1 wherein prior to preparing the outer surface, the method further comprises solidifying the core material by at least one of temperature change, polymerization, and cross-linking.

6. The method of claim 1 wherein the core material contains at least one of low melting waxes, naphthalene, naphthalene derivatives, acrylic monomers, acrylic polymers, camphor, camphor derivatives, camphinic acid polymers, polyesters, and mixtures thereof.

7. The method of claim 1, further comprising converting the solidified core material contained in the chamber into a fluidized core material subsequent to establishing the layer.

8. The method of claim 7, further comprising removing at least a portion of the fluidized core material from the chamber subsequent to converting the solidified core material.

9. The method of claim 7 further comprising operating the electronic device with at least a portion of the fluidized core material present in the chamber.

10. The method of claim 1 wherein establishing the layer is accomplished by at least one of spin deposition and sputter deposition.

11. The method of claim 1 wherein the layer is formed of an optical quality material, the optical quality material including at least one of acrylates, epoxies, polycarbonates, polyimides, TEOS, silicate, polycarbonate, magnesium fluoride, quartz, and glass.

12. The method of claim 1, further comprising removing at least a portion of the core material after the layer has been established.

13. The method of claim 12 wherein removing comprises at least one of sublimation, solvent dissolution, melting, and gas purging.

14. The method of claim 1 wherein the electronic device has a minimum operating temperature and wherein the core material solidifies at a temperature below the minimum operating temperature for the electronic device.

15. The method of claim 5, further comprising:

positioning at least one microelectromechanical device in the depression, the positioning occurring prior to preparing the outer surface; and

introducing the core material into the depression such that the core material and the depression are in conforming relationship to each other, the introducing occurring prior to the solidifying.

16. The method of claim 15 wherein the microelectromechanical device is an optic MEMS device.

17. An integrated circuit device, comprising:

a substrate;

a layer attached to the substrate in overlying sealed relationship therewith, wherein at least one of the substrate and the layer have a depression defined therein, the substrate and the layer defining a chamber;

a microstructure or a microelectromechanical device positioned in the chamber; and

a bifunctional core material present in the chamber, the bifunctional core material exhibiting a solidified state at a first condition and a fluidized state at a second condition.

18. The integrated circuit device of claim 17 wherein at least one of the substrate and the layer is composed of an optically transmissive material.

19. The integrated circuit of claim 17 wherein at least one of the substrate and the layer exhibit at least one optical quality including visible light transmission, reflection, and diffraction.

20. The integrated circuit device of claim 17 wherein the bifunctional core material is conformal to a chamber wall when the bifunctional core material is in the solidified state.

21. The integrated circuit device of claim 17 wherein the microelectromechanical device is an optical MEMS device.

22. The integrated circuit device of claim 17 wherein the bifunctional core material exhibits sufficient fluidization in the fluidized state such that the bifunctional core material in the fluidized state is adapted to be removed from the chamber.

23. The integrated circuit device of claim 17 wherein the bifunctional core material is in the fluidized state and has properties including at least one of optical modulation and modified refractive index such that the bifunctional core material aids in optimal operation of the microelectromechanical device.

24. A process for making an optical microelectromechanical device, comprising:

introducing a bifunctional core material into a cavity defined in a substrate; and

establishing a layer on the bifunctional core material and the substrate, the layer and substrate defining a sealed chamber therebetween.

25. The process of claim 24 wherein the layer has an optical quality including at least one of optical transmission, reflectance, and diffraction.

26. The process of claim 24 wherein the cavity contains a microelectromechanical device and the bifunctional core material is placed in comprehensive contact with the microelectromechanical device and conformal relationship with the cavity.

27. The process of claim 24 wherein the bifunctional core material has at least two physical states, the two physical states including at least a solidified state at a first condition and a fluidized state at a second condition.

28. The process of claim 27 wherein the first and second conditions are first and second temperatures, wherein the second temperature is greater than the first temperature, wherein the bifunctional core material is introduced at a temperature at least as great as the second temperature, and wherein the establishing occurs while the bifunctional core material is in the solidified state.

29. The process of claim 27, further comprising removing the bifunctional core material subsequent to establishing.

30. The process of claim 27, further comprising maintaining the bifunctional core material in the sealed chamber during operation of the device.

31. The process of claim 24, further comprising preparing a surface on an outer face of the bifunctional core material prior to establishing.

32. An optical microelectromechanical device produced by the process of claim 24.

33. The device of claim 32 wherein at least one of the substrate and the layer exhibit at least one optical quality.

34. The device of claim 33 wherein the optical quality is at least one of light transmission, reflectance, and diffraction.

35. The device of claim 32 wherein the bifunctional core material is conformal to a chamber wall when the bifunctional core material is in a solidified state.

36. A display device, comprising:

a light source for providing a beam of light along a light path;

a device on the light path for selectively reflecting a portion of the beam of light along a second light path in response to image data signals;

a controller for providing the image data signals to the device on the light path device; and

at least one element on the second light path for resolving the selectively reflected light into an image;

wherein the device for selectively reflecting light includes:

a substrate;

an upper substrate layer disposed a spaced distance from the substrate, the substrate and the upper substrate layer defining a chamber, wherein at least one of the upper substrate layer and the substrate are optically transmissive; and

at least one microelectomechanical device supported in the chamber.

37. The display device of claim 36, further comprising a bifunctional core material present in the chamber, the bifunctional core material exhibiting a solidified state at a first condition and a fluidized state at a second condition, wherein the first and second conditions are at least one of variable temperature and magnetic field.

38. The display device of claim 37 wherein the bifunctional core material is conformal to a chamber wall when the bifunctional core material is in the solidified state.

39. The display device of claim 37 wherein the bifunctional core material exhibits sufficient fluidization in the fluidized state such that the bifunctional core material in the fluidized state is adapted to be removed from the chamber.

40. The display device of claim 37 wherein the first and second conditions are first and second temperatures, wherein the bifunctional core material is in the fluidized state at the second temperature, and wherein in the fluidized state the bifunctional core material has properties including at least one of optical modulation and modified refractive index so as to aid in optimal operation of the microelectromechanical device.